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2002-521850

DERWENT-WEEK:

200259

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TITLE:

Display with automatic

brightness control system for a

vehicle dashboard or portable

electronic equipment

includes a logarithmic sensor

and a control circuit

selecting a luminance from a

sequence, and user setting

buttons

INVENTOR: WEINDORF, P F L; LUTHER WEINDORF, P F

PRIORITY-DATA: 2000US-0747597 (December 22, 2000)

PATENT-FAMILY:

PUB-NO PUB-DATE

LANGUAGE PAGES MAIN-IPC

US 20020118182 A1 August 29, 2002

N/A 000 G09G 005/00 EP 1217598 A2 June 26, 2002

E 021 G09G 003/34

INT-CL (IPC): G09G003/20, G09G003/34,

G09G005/00

ABSTRACTED-PUB-NO: EP 1217598A

BASIC-ABSTRACT:

NOVELTY - A display (100) has a back light (102), a

display panel (104), a bezel (106), a control circuit (108), a voltage supply (110), user setting buttons (112) and a logarithmic sensor (114). The sensor logarithmically generates a signal in response to ambient light near the lighted display and the control circuit selects a display luminance from a sequence having constant ratio steps. The display luminance is a fractional power function of the ambient light near the display.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following

- (a) a display including brightness control using a logarithmic sensor and a user brightness selection control, and selecting a brightness according to day or night
- (b) and a method of controlling brightness in a display using a photodiode and logarithmic amplifier sensor.

USE - The display having an automatic brightness control system is used for a vehicle dashboard or portable electronic equipment e.g. computer.

ADVANTAGE - The system and method adjusts brightness perceived as linear changes by a user and allows the user to set a preference. The logarithmic function provides brightness for comfortable viewing and good luminance even at low ambient lighting levels. The method can be applied to a range of displays including backlight, front light and emissive displays.

DESCRIPTION OF DRAWING(S) - The figure shows a side view of a backlight display having an automatic brightness control system.

Display 100

Back light 102

Display panel (106) Bezel 104

Control circuit 108

Voltage supply 110

User setting buttons 112

Logarithmic sensor 114

ABSTRACTED-PUB-NO: US20020118182A

EQUIVALENT-ABSTRACTS:

NOVELTY - A display (100) has a back light (102), a display panel (104), a bezel (106), a control circuit (108), a voltage supply (110), user setting buttons (112) and a logarithmic sensor (114). The sensor logarithmically generates a signal in response to ambient light near the lighted display and the control circuit selects a display luminance from a sequence having constant ratio steps. The display luminance is a fractional power function of the ambient light near the display.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following

(a) a display including brightness control using a

logarithmic sensor and a user brightness selection control, and selecting a brightness according to day or night

(b) and a method of controlling brightness in a display using a photodiode and logarithmic amplifier sensor.

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Patent Family Serial Number - PFPN (1): 20020118182